PAJENT COOPERATION TREATY

From the INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:

MARGOLIS, Andrew Legal Department Symbian Software Limited 2-6 Boundary Row London SE1 8HP GRANDE BRETAGNE

PCT

NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(PCT Rule 71.1)

Date of mailing

(day/month/year)

26.04.2006

Applicant's or agent's file reference

IMPORTANT NOTIFICATION

International application No. PCT/GB2005/001300

International filing date (day/month/year)

Priority date (day/month/year)

01.04.2005 02.04.2004

Applicant

SYMBIAN SOFTWARE LIMITED

- 1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary report on patentability and its annexes, if any, established on the international application.
- 2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
- 3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

4. REMINDER

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary report on patentability. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

The applicant's attention is drawn to Article 33(5), which provides that the criteria of novelty, inventive step and industrial applicability described in Article 33(2) to (4) merely serve the purposes of international preliminary examination and that "any Contracting State may apply additional or different criteria for the purposes of deciding whether, in that State, the claimed inventions is patentable or not" (see also Article 27(5)). Such additional criteria may relate, for example, to exemptions from patentability, requirements for enabling disclosure, clarity and support for the claims.

Name and mailing address of the international preliminary examining authority:

<u>)</u>

European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016 Authorized Officer

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PAIENT COOPERATION TREATY

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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicable or agents file reference				
Applicant's or agent's file reference	FOR FURTHER	ACTION	See Form PCT/IPEA/416	
International application No. International filing da PCT/GB2005/001300 01.04.2005		e (day/month/year)	Priority date (day/month/year) 02.04.2004	
International Patent Classification (IPC) or n. INV. G06F9/46	L. ational classification and	IPC		
Applicant SYMBIAN SOFTWARE LIMITED				
This report is the international pre Authority under Article 35 and tran	liminary examination in smitted to the applica	report, established by the ant according to Article (nis International Preliminary Examining 36.	
2. This REPORT consists of a total of 5 sheets, including this cover sheet.				
3. This report is also accompanied by ANNEXES, comprising:				
a. 🗵 sent to the applicant and to	a. 🛮 sent to the applicant and to the International Bureau) a total of 8 sheets, as follows:			
sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).				
☐ sheets which supersed beyond the disclosure Supplemental Box.	de earlier sheets, but y in the international ap	which this Authority con plication as filed, as ind	siders contain an amendment that goes licated in item 4 of Box No. I and the	
b. (sent to the International Basequence listing and/or tab Relating to Sequence Listin	les related thereto, in	electronic form only, as	er of electronic carrier(s)) , containing a indicated in the Supplemental Box ructions).	
4. This report contains indications re-	ating to the following	tems:		
	ort			
☐ Box No. II Priority				
☐ Box No. III Non-establishme	ent of opinion with reg	ard to novelty, inventive	step and industrial applicability	
☐ Box No. IV Lack of unity of i		•	,,	
	ment under Article 35(tions and explanation	2) with regard to novelty such state	y, inventive step or industrial ment	
☐ Box No. VI Certain documer	nts cited			
☐ Box No. VII Certain defects i	n the international app	lication		
☐ Box No. VIII Certain observat	ions on the internation	nal application		
Date of submission of the demand		Date of completion of th	is report	
01.02.2006		26.04.2006		
Name and mailing address of the international		Authorized officer	-941-	
preliminary examining authority: European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo.nl		de Man, A	The state of the s	
Fax: +31 70 340 - 3016		Telephone No. +31 70 3	40-4527	

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No. PCT/GB2005/001300

	Box No. I Basis of the report			
1.	With regard to the language, thi	s report is based on		
		in the language in which it was filed		
	of a translation furnished for □ international search (und □ publication of the interna	onal application into , which is the language r the purposes of: der Rules 12.3(a) and 23.1(b)) tional application (under Rule 12.4(a)) examination (under Rules 55.2(a) and/or 55.3(a))		
2.	With regard to the elements * of have been furnished to the receive report as "originally filed" and an	the international application, this report is based on (replacement sheets which iving Office in response to an invitation under Article 14 are referred to in this e not annexed to this report):		
Description, Pages				
	1-5, 8-16	as originally filed		
	6, 7, 7a	received on 02.02.2006 with letter of 31.01.2006		
	Claims, Numbers			
	1-31	received on 02.02.2006 with letter of 31.01.2006		
Drawings, Sheets				
	1/1	as originally filed		
	☐ a sequence listing and/or an	y related table(s) - see Supplemental Box Relating to Sequence Listing		
3.	 □ The amendments have resulted in the cancellation of: □ the description, pages □ the claims, Nos. □ the drawings, sheets/figs □ the sequence listing (specify): □ any table(s) related to sequence listing (specify): 			
L.	☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)). ☐ the description, pages ☐ the claims, Nos. ☐ the drawings, sheets/figs ☐ the sequence listing (specify): ☐ any table(s) related to sequence listing (specify):			
	* If item 4 applies, so	me or all of these sheets may be marked "superseded."		

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No. PCT/GB2005/001300

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)

Yes: Claims

1-31

No:

Claims

Inventive step (IS)

Yes: Claims

Claims

1-31

Industrial applicability (IA)

No:

Yes: Claims

1-31

No: Claims

2. Citations and explanations (Rule 70.7):

see separate sheet

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

- 1 Reference is made to the following document:
 - D1: Cherepov, "Hard Real-Time With RTX on Windows NT" (July 1999)
- 2 Document D1 discloses, using the wording of claim 1 insofar as possible,

a computing device comprising a scheduler incorporating an algorithm for ordering the running of threads of execution having different priorities (page 107, right-hand column, lines 8-19; RTSS scheduler); and

wherein a ready list is kept of threads which are scheduled to run on the device, ordered by priority (page 107, right-hand column, lines 20-30; ready queue per priority);

the device further comprising at least one locking mechanism for blocking access to a resource of the device from all threads except for a thread that holds the locking mechanism (page 107, right-hand column, lines 43-49; access to an object is blocked for a high priority thread while a low priority thread holds the object):

and wherein, when a scheduled thread is blocked from running because the resource it requires is locked, the thread which holds the lock is caused to run (page 107, right-hand column, lines 43-49; the effective priority of the low priority thread that holds the object is promoted to that of the high priority thread, thereby implicitly causing it to run),

from which the subject-matter of claim 1 differs in that the blocked thread is not removed from its place on the ready list.

This difference merely relates to an implementation detail of the priority inheritance scheme. The fact that the blocked thread is not removed from the ready list does not

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (SEPARATE SHEET)

International application No.

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by itself imply any technical advantage over what is disclosed in document D1. Not removing a blocked thread from the ready list, but, for example, flagging it as blocked, is therefore regarded as an obvious design possibility for the skilled person.

Thus the subject-matter of claim 1 does not involve an inventive step (Article 33(3) PCT).

- The subject-matter of independent claims 17 and 18 largely corresponds to the subject-matter of claim 1, which is found to lack inventive step. Thus, for substantially the same reasons as above, the subject-matter of claims 17 and 18 is not new either (Article 33(3) PCT).
- The additional features of dependent claims 2, 4, 19 and 21 are also disclosed by document D1, see page 107, right-hand column, lines 8-30.
 - Thus the subject-matter of claims 2, 4, 19 and 21 does not involve an inventive step (Article 33(3) PCT).
- Dependent claims 3, 5-16, 20 and 22-31 specify obvious and well-known features that merely define implementation details of the scheduler and locking mechanism, not affecting the actual scheduling scheme or achieving any non-obvious technical advantages. These features are therefore not considered to contribute to an inventive step.

Thus the subject-matter of claims 3, 5-16, 20 and 22-31 does not involve an inventive step (Article 33(3) PCT).